Brice™

Operation and Safety Manual

Model
VA2000
Programmable Automatic Slicer

SAFETY ISSUES

1. **NEVER** touch this machine without training and aythorisation from your supervisor.
2. Machine **MUST BE** on solid, level support.
3. Guards **MUST BE** in place before plugging in and turning on machine.
4. **ALWAYS** use the three-pronged plug provided.
5. **NEVER** use your hand to hold food stuffs in place on the meat table.
6. **NEVER** touch the slicer blade when it is rotating.
7. **KEEP** hands, arms, hair and loose clothing **CLEAR** of all moving parts.
8. Should the slicer jam, **TURN OFF AND UNPLUG** before removing the obstruction.
9. **TURN OFF AND UNPLUG** the machine from its power source before cleaning, sanitizing or servicing.
10. **USE ONLY** the attachments provided by the manufacturer and designed for this machine.

YOUR SAFETY IS OUR PRIMARY CONCERN

DECLARATION OF CONFORMITY

Slicer

Machine Model:	
Serial Number:	
Dated:	

is built in conformity with the provisions of:

98/37/CEE	Machinery Directive
EN 1974	Food processing machinery - Slicing machines - Safety and hygiene requirements.
EN 60204	Electrical equipment of industrial machines: Part 1 - General Design
89/109/CEE	Directive for the materials and things destined to come into contact with food.
89/336/CEE	Directive on Electromagnetic Compatibility (EMC)
73/23/EEC	Directive on low voltage.

Introduction

Overview

This Operation and Safety Manual has been prepared to introduce you to the Brice Model VA2000 Automatic slicer. It explains the operation, cleaning and maintenance of the slicer in simple, clear terms and with an emphasis on your safety.

Throughout the Manual procedures are supported by photographs showing the parts involved and the recommended safe method of handling those parts.

A word to the wise

This Manual is really two sets of instructions in one - some sections are relevant to all Brice slicers, while other sections only concern a particular slicer or range of slicers.

Make sure that you read this Manual carefully so that you are familiar with the features and procedures that are unique to the slicer that came with it.

How this Manual is arranged

This Manual is made up of four sections:

- Introduction - which explains the Manual, itself, safety issues associated with using a slicer, gives a brief introduction to the features and components of the slicer and steps you through the installation of the machine;
- Operation - explains the use of the slicer;
- Cleaning - explains the procedures for keeping the slicer clean; and
- Maintenance - details those procedures that you can perform to ensure the trouble-free operation of the slicer.
- Trouble-shooting - a quick reference chart to help you solve some of the problems you might encounter with the Model VA2000.

Conventions and Symbols used in this Manual

To reduce confusion, and to highlight important points and safety matters, we have established some standard terms and symbols:

- “slicer”
  Whenever we talk about the slicer, we mean the slicer that is covered in this Manual.
- “foodstuff”
  We use the word “foodstuff” to refer to any kind of meat or other food that is usually sliced on a slicer.
- “meat table”
  This is the table (usually on the right side of the slicer) on which you place the foodstuff to be sliced. On gravity-feed slicers the meat table is steeply angled.
- “meat grip”
  The meat grip is the device that holds the foodstuff in position on the meat table. It is usually attached to the meat table and moves with the foodstuff as it is sliced.
- “Last Slice device”
  This device (where fitted) is usually part of the meat grip and is used to hold small and hard-to-handle stubs of processed foodstuffs (particularly meats) so that they can be sliced to the last slice.
- “thickness control”
  This is the mechanism by which you control the slice thickness, and is usually a large rotary control on the front of the machine. It may or may not be illuminated, depending on the individual slicer.
- “sharpener”
  When we talk about the sharpener, we mean a built-in blade sharpening or grinding device that has a grinding stone and, optionally, a finishing stone.

- The Special Note flag
  This is an upside-down triangle with an exclamation mark inside it. It appears in the left margin of the page, like this, whenever we want to draw your attention to an important point.

- The "No Hands" warning flag
  This is a circle with the outline of a hand and a black bar through the hand. It appears wherever we want to warn you that either: you shouldn't put your hands in or near a particular component; or that you must wear steel mesh protective gloves to carry out a particular procedure.

- The "Power" warning flags
  There are two power warning flags. The first, a lightning bolt inside an upside-down triangle, is used whenever we want to remind and warn you that the slicer is connected to the mains power supply. The second warning flag is a circle with the outline of a lighting bolt and a black bar through the bolt. It appears to remind you that a particular procedure must be carried out with the power to the slicer turned off at the powerpoint and the slicer's power plug disconnected from the powerpoint.

SAFETY WARNINGS

This is an electrical device that uses mains (either single phase 240 Volt or 3 phase 380 Volt) power. It uses a high speed rotating blade that is extremely sharp. You must be careful in how you handle the slicer at all times. The following special warnings must be complied with for your own safety and the safety of others.

THERE ARE NO USER-SERVICEABLE ELECTRICAL COMPONENTS IN THIS SLICER. ALL ELECTRICAL COMPONENTS ARE ELECTRICALLY ISOLATED TO EARTH AND ARE SEALED FOR YOUR SAFETY. YOU MUST NOT ATTEMPT TO TOUCH ANY ELECTRICAL COMPONENTS OR WIRES - YOU MAY EXPOSE YOURSELF TO THE RISK OF SERIOUS INJURY BY ELECTROCUTION.

UNLESS OTHERWISE INDICATED, ANY CLEANING OR MAINTENANCE PROCEDURE MUST BE PERFORMED WITH THE POWER TO THE SLICER SWITCHED OFF AND THE SLICER'S POWER CORD DISCONNECTED FROM THE POWERPOINT. FAILURE TO TURN OFF AND DISCONNECT POWER MAY RESULT IN SERIOUS INJURY CAUSED BY THE SLICER BEING ACCIDENTLY TURNED ON DURING CLEANING OR MAINTENANCE.

Slicer blades are extremely sharp and can cut through fingers and hands just as easily as products to be sliced.

WHENEVER YOU CARRY OUT ANY PROCEDURE THAT PLACES YOUR HANDS ON OR NEAR THE SLICER BLADE YOU MUST WEAR SUITABLE PROTECTIVE HAND COVERINGS SUCH AS STEEL MESH GLOVES TO PREVENT ACCIDENTAL INJURY FROM THE BLADE.

The Brice Model VA2000 Automatic slicer

The Model VA2000 food slicer is built for high volumes and hard work. It is fully automatic, electronically controlled, fast, clean and efficient.

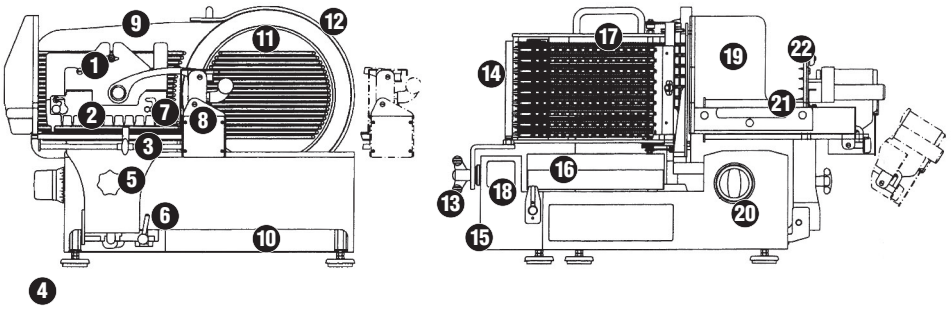
Besides slicing food products, it collects the slices on a product receiving tray in either vertical stacks or shingled groups.

Depending on the product width, two or more pieces may be loaded on the meat table for one slice operation, increasing productivity.

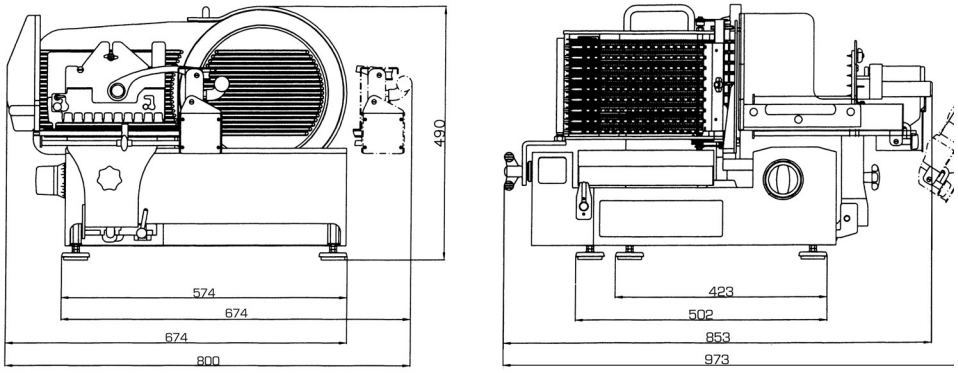
- Manufactured in stainless steel to resist the corrosive effects of salts and acids;
- Fully automatic slicing and stacking operations;
- Combined End Piece Holder and Meat Comb to minimise slicing waste;
- Complete self contained inbuilt sharpening device;
- Chain driven blade and fan-cooled motor;
- Safety cutout switches for sharpener and blade cover;
- Separate push-button ON, OFF and START switches for safety.

Components and Dimensions of the VA2000

The following pictures illustrate the main components and dimensions of the slicer.



1	end piece holder	9	thickness plate	17	chain frame
2	comb, end piece holder	10	meat table guiding axle	18	keyboard
3	adjusting bar	11	blade guard	19	hand protection
4	rubber foot	12	fixed ring	20	thickness knob
5	star knob for carriage	13	star knob stacking device	21	guiding axle, end piece holder
6	auto/manual carriage selector	14	stacking device	22	plate of end piece holder
7	carriage feed plate	15	rating plate		
8	carriage	16	receiving plate		



Installing the slicer

Positioning the slicer

No matter where you put the slicer, you must allow at least as much space as the overall dimensions indicate. Allowing an additional minimum of 20cm either side of the slicer will make access for cleaning and maintenance easier.

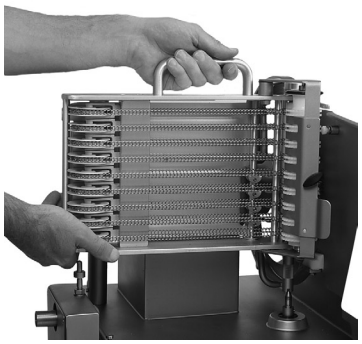
This is a very heavy piece of machinery. Under no circumstances should you attempt to move or lift the slicer without assistance.

Make sure that the surface that you intend placing the slicer on is solidly constructed to take the weight of the slicer, flat, level, dry and smooth. Ideally, the surface should be between 80cm and 90cm high and built for the purpose.

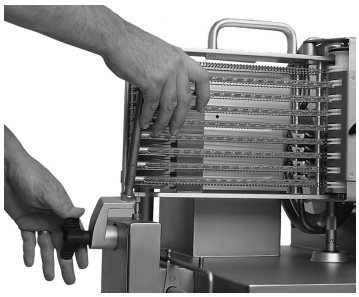
Assembling the components

Once the VA2000 is securely positioned, you can assemble the rest of the slicer's components:

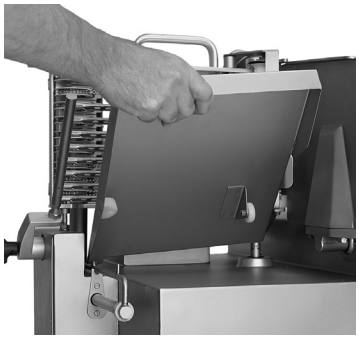
Place the Conveyor Chain frame assembly on its three locating bolts.



Place the Stacker arm on its location bushing and screw its locking knob down tightly.



Place the Receiving Plate on the machine.



Electrical connections

The slicer connects to either a single phase 240 Volts or a 3 phase 380 Volts power supply using the power cord supplied. Simply connect the plug on the end of the power cord to the power point.

If you don't know whether the slicer uses single phase or 3 phase power, check the identification label on the machine - it will indicate the voltage rating.

Checking Blade rotation

Switch on the machine by pushing the green push button - Display is illuminated.

Close the thickness plate completely.

The blade has to rotate in direction of arrow (counter clockwise).

Stop the blade by pushing the red "Stop" button.

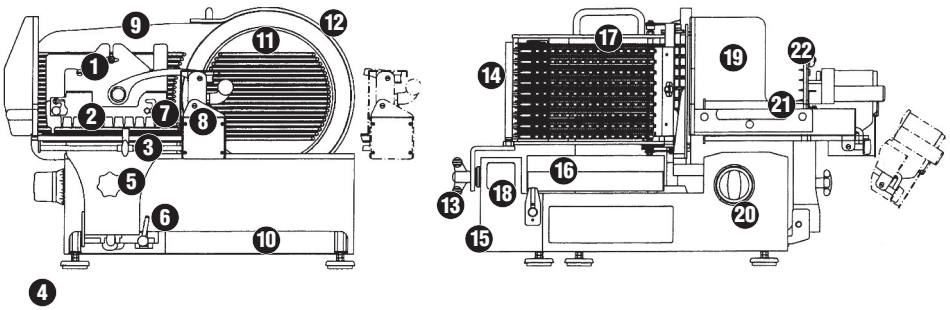
If the blade rotates in the wrong direction, the plug has been incorrectly wired and must be changed by an electrician or service technician.

Cleaning

Before you use the slicer, we recommend that you wipe down all exposed surfaces with a soft cloth that has been placed in clean warm water and light detergent and squeezed dry. This will remove any traces of machine oil, dirt or grit picked up during manufacture or storage.

Before you wipe down the machine, make sure that the thickness control is set to zero so that the slicer blade edge is shielded, and make sure that the power is turned off.

Operation



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5	star knob for carriage	13	star knob stacking device	21	guiding axle, end piece holder
6	auto/manual carriage selector	14	stacking device	22	plate of end piece holder
7	carriage feed plate	15	rating plate		
8	carriage	16	receiving plate		

Things to keep in mind

1. **The foodstuff should only be loaded onto the meat table with the thickness control set to zero and the power switched off at the at the control panel.**

   Aside from being essential to your safety, these conditions keep the foodstuff to be sliced (particularly if it is solid) from being accidently knocked against the cutting edge of the blade, which could be damaged.
2. **The VA2000 is an automatic slicer. If the machine doesn't operate there is a reason for it. Check the section on Trouble shooting for assistance.**
3. **Sharpen the blade as soon as the sliced foodstuff begins to look ragged or roughened, or when the effort required to slice increases significantly. Refer to the Maintenance section for the correct procedure for blade sharpening.**
4. **Some products should not be sliced on the VA2000 because of the risk of injury to the operator:**
   - **Non-food articles**
   - **Food products with bones**
   - **Deep-frozen food products**

Pre-operational checks

Before using the machine check the following:

- Is the stacker arm firmly located in its correct position?
  Check knob 13
- Is the conveyor chain frame securely located on its three mounting pins?
  Check component 17
- Is the meat table locked securely in the "automatic" position (lever 6 in upper position)?
  Check lever 6.
- Is the end piece holder located correctly?
  Check component 1
- Is the comb plate fitted beneath the end piece holder and secure?
  Check component 2
- Does the blade need sharpening? (see the sharpening procedure)

- Is the sharpener assembly in down position and not in sharpening position?
- Is the slice thickness set to zero? (Blade must be in line with the thickness plate)
  Check knob 18

Switch functions (push button)

green push button = main switch on

red push button = main switch off

Thickness of slices

The thickness of slices is infinitely variable from 0 to 10 mm. In order to adjust slice thickness turn the thickness knob. Turning to the right: thickness plate opens. Turning to the left: thickness plate closes. The scale on the thickness knob indicate slice thickness.

Automatic or manual movement of the carriage

The VA2000's carriage moves automatically in operation. However, it can be disengaged by means of a locking lever and the carriage moved by hand for cleaning and sharpening.

automatic movement = lever in upper position

movement by hand = lever in horizonatal position

Adjusting automatic movement

1. Switch off the machine.
2. Push the lever counter-clockwise to upper position.
3. Move the carriage by hand until it is engaged.
4. Carriage can no longer be moved by hand now.

Adjusting movement by hand

1. Switch off the machine.
2. Pull lever into horizontal position.
3. Carriage can be moved by hand now.

Always switch off the machine before adjusting the carriage movement!

If the carriage does not move after the "Stacking" or "Shingling" button is pushed, the carriage locking lever may not have been moved to the automatic (upper) position.

In this case proceed as follows:

1. switch off the machine at the red main switch
2. adjust the carriage locking lever, as described above
3. switch on the machine at the green main switch
4. push the "Stacking" or "Shingling" button in order to start automatic slicing
5. after the slicing task is finished, turn thickness knob to zero
6. switch off the machine

Automatic Operation

Engaging carriage

1. Ensure that the carriage locking lever is in the upper position
2. Move the carriage by hand until the carriage engages.

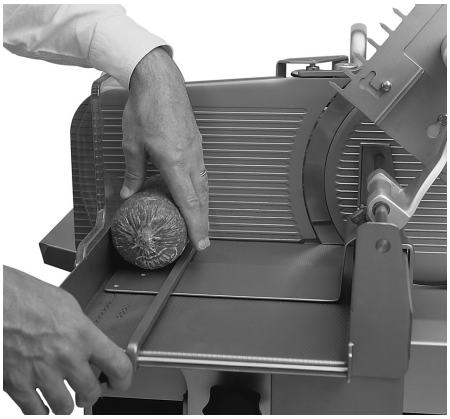
Carriage can no longer be moved by hand.

Loading the carriage and adjusting the thickness of slices

1. Lift up end piece holder.
2. Lay the food product against the back of the carriage.
3. Adjust the adjusting bar according to the size of the food product.
4. Place the end piece holder upon the food product.
5. Push the comb of the end piece holder into the food product.
6. Adjust the thickness of slices with the thickness knob (max. 10 mm).
7. Position the end piece holder so that the food product is pushed up against the thickness plate.

Slicing of end pieces

Be sure to cut off the end piece from the foodstuff being sliced - the end piece holder cannot correctly hold the foodstuff with the end left on. Alternatively, turn the original cutting side of the food product to face the end piece holder.



Adjusting the speed of the carriage.

Once the machine has been switched on, you can adjust the carriage speed using the “carriage faster” and “carriage slower” buttons. The range is from 26 slices (MIN) up to 55 slices per minute (MAX).

Note that delicate food products have to be sliced using a slower carriage speed.

carriage faster

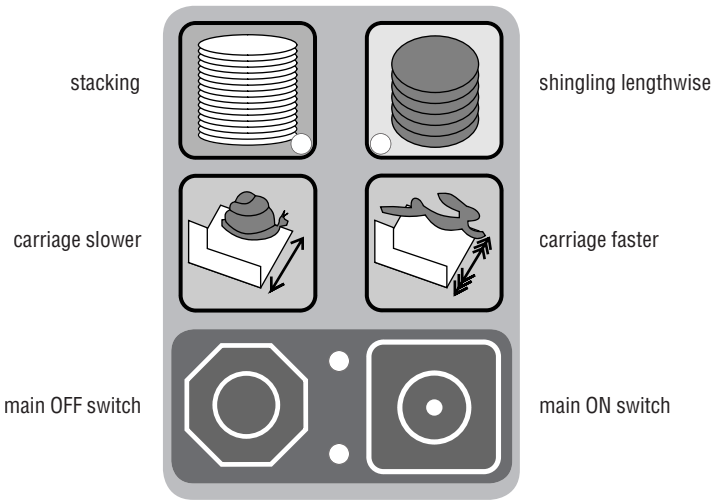
carriage slower

Slicing programs

What the Slicing programs do

The VA2000 provides two pre-set programs to carry out automatic slicing and shingling operations

The VA2000 keyboard



Starting the slicing program

With the meat table loaded and the thickness correctly adjusted, start the slicing program as follows:

1. Push the green main switch.
2. Select the appropriate slicing program (stacking or shingling) using the two program buttons.
3. The VA2000 will now begin its pre-programmed function.
4. When the program has been completed, or when you want to stop the program for any reason, push the “stacking” or “shingling” button again.

Cleaning the Slicer

This section deals with cleaning your slicer, including blade cleaning.

We recommend that, before cleaning or maintenance tasks are undertaken, the machine operator(s) receive some training from authorised Brice representatives, preferably during the installation phase.

Before carrying out cleaning or maintenance tasks, it is very important that:

1. **the unit is switched off by pressing the red "OFF" button**
2. **the thickness control is set to its "zero" position.**

Be very careful performing any cleaning or maintenance task that brings you close to, or in contact with, the slicer blade. Always perform these tasks with the appropriate protection - steel mesh safety gloves. The blade is very sharp and the risk of a cutting injury without proper protection or due care is high.

General Cleaning

The VA2000 slicer must be cleaned regularly (at least once a day) and carefully to ensure hygenic operation.

DO NOT use steam cleaning or high pressure water cleaning equipment with this machine. DO NOT pour water over the machine.

Before using the slicer

1. Before the slicer is switched on for the first time each day, quickly wipe over all exposed surfaces with a cloth that has been placed in warm water and squeezed dry. This removes any dust or other matter that may have been deposited over night.
2. Before the start of each cutting operation, and with the slicer switched off, wipe down the slicing guide, the meat tray and the receiving tray to remove any residual material left from the last cutting operation.

At the end of the day

1. Tum the thickness indicator to zero.
2. Switch-OFF the slicer.
3. Remove the plug from its power socket.
4. Remove the stacking device (14) by unlocking securing knob 13 and lifting it to the side.
5. Remove the chain frame. Pull the roll of the chain frame to the left. Lift the chain frame straight up and gently place it on a flat surface to avoid damage to the chain pins.
6. Pull out the receiving plate (16) by lifting at its leading edge and pulling toward you.
7. Raise the end piece holder and remove the end piece holder comb (2) by loosening the knurled knob securing it to the end piece holder (lower knob).
8. Remove the end piece holder plate (22) by loosening the knurled knobs securing it to the end piece holder (upper knobs).
9. Loosen the knob securing the adjusting bar (3) and lift it away from the carriage feed plate.
10. Remove the feed plate to the carriage by lifting it upwards.
11. Disengage and tilt the carriage by:
    - moving the carriage movement selector lever (6) into the manual (horizontal) position;
    - loosening the star knob for the carriage(5); and
    - pulling the carriage to the front of the machine and tilting it aside.

12. Loosen the large knurled knob at the back of the blade drive housing (behind the blade) while steadying the blade guard (11). Push the knob back in to press the blade guide out into your hand.

When the machine is dismantled for cleaning, the individual parts may be cleaned and sterilised by total immersion in warm water with addition of a non toxic detergent. A brush assists in the cleaning process.

After the parts have been cleaned they should be rinsed in clean hot water.

Wash down the body of the machine using a cloth immersed in warm water and detergent. Rinse the machine with a cloth immersed in clean hot water and wipe dry.

When dry, each part should be fitted to the machine in the reverse order of dismantling.

Cleaning the Blade

The blade should only be cleaned either before the main body of the machine is cleaned, or after it has been wiped dry from cleaning.

Extreme care must be taken when cleaning the blade. You must wear appropriate hand protection, such as steel mesh safety gloves, for this procedure as it involves touching the blade. You risk serious injury if you do not wear protective gloves.

To clean the blade, proceed as follows:

1. With the machine partially disassembled and the blade guard removed, plug the machine back into the power supply.
2. Switch on the machine by pushing the green push button - Display is illuminated.
3. If you have not already done so, close the thickness plate completely. Push the “Stacking” key. The blade will start rotating.
4. As the blade rotates, slowly wipe a cloth immersed in warm water and detergent across the face of the blade toward the thickness plate. Repeat on the back of the blade.
5. Push the “Stacking” key again to stop the blade.
6. Switch off the machine by pressing the red push button, and then remove the plug from the power socket.
7. CAREFULLY place a moist cloth between the blade edge and the fixed blade guard ring. Turning the blade by hand, guide the cloth around the inside of the guard ring.
8. CAREFULLY dry off the blade and blade guard ring before reassembling.

Cleaning Schedule

How frequently the slicer is cleaned will depend on how heavily the machine is used. However, we recommend that you thoroughly clean the machine at least once a day as a MINIMUM requirement to maintain hygene.

The cleaning schedule

	Before first use	After every use	Every half day	After last use
Wipe down slicing guide, meat table & centre plate		✓		
Wipe down all exposed surfaces (no disassembly)	✓		✓	
Clean all surfaces including blade (disassemble machine)			✓	✓

Maintenance

This section deals with routine maintenance for the VA2000, including blade sharpening.

We recommend that before maintenance tasks are undertaken the machine operator(s) receive some training from authorised Brice representatives, preferably during the installation phase.

Before carrying out maintenance tasks, it is very important that:

1. **power to the slicer is switched OFF at the red OFF button; and**
2. **the thickness control is set to its "zero" position.**

Be very careful performing maintenance tasks that brings you close to, or in contact with, any moving parts, especially at the feed and discharge areas, and the blade. Always perform these tasks with the appropriate protection - steel mesh safety gloves. The blade is very sharp and the risk of a cutting injury without proper protection or due care is high.

Routine Maintenance

The robust design of the slicer means that there is very little required in the way of routine maintenance. Generally, the only maintenance required is cleaning (discussed in the previous section) and oiling. Blade sharpening is required when the blade no longer slices cleanly.

Oiling the machine

Most of the components that require lubrication are either sealed in oil baths or have self-lubricating bearings and no user maintenance is required. However, the exposed guide axles for the end piece holder and the carriage should be lightly oiled once a week, or when they become difficult to move.

Cleaning prior to maintenance

We recommend that you clean the machine prior to any other maintenance operation so that all surfaces are free of and grease. This makes the machine easier and safer to handle.

Blade sharpening

The sharpener device (with its own grinding and finishing stones) makes blade sharpening a simple task.

However, because you must clean the blade before sharpening, you must wear protective steel mesh gloves during this operation. Clean the blade inaccordance with the instructions in the previous section.

Part of this operation requires the slicer to be switched on with the blade rotating. You should take the utmost care during that phase of the operation.

The slicer blade requires regular sharpening to work cleanly and efficiently. How often you sharpen the blade will depend on the condition of the blade after use and the type of products being sliced.

To keep the blade working efficiently, we recommend that you sharpen it at least once every day.

You should keep in mind the following things when sharpening the blade:

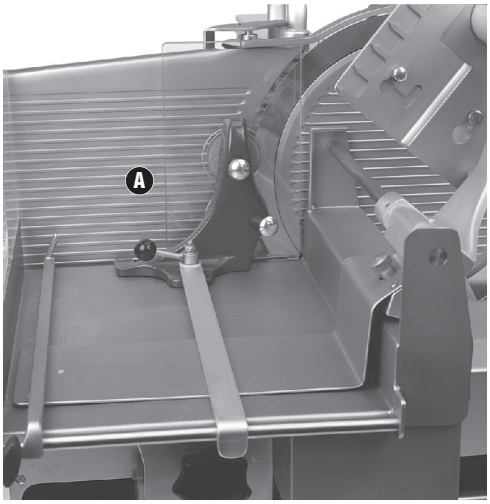
1. The blade should only be sharpened after the slicer has been cleaned as specified in the previous section; and

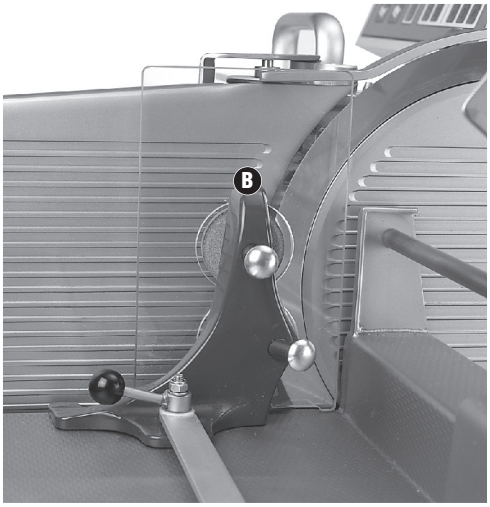
2. The sharpener cannot function properly once the blade diameter has been reduced by more than 5mm. Contact your authorised Brice technician to arrange for a replacement once the blade wears to this point.
3. The sharpening device is marked with the serial number of the machine it comes with and has been matched with the blade at the factory. Only use a sharpening device whose serial number matches that of your machine.

To sharpen the blade:

Once the machine has been thoroughly cleaned and reassembled in accordance with the instructions in the previous section, begin the blade sharpening procedure:

1. Reconnect the machine to its power source and press the green push button.
2. Place the carriage movement selector lever (6) in the manual (horizontal) position.
3. Turn the thickness knob to its highest position so that the thickness plate is fully open.
4. Pull the carriage fully to the front and raise the end piece holder.
5. Position the sharpening device on the carriage The claws at the head of the device have to grip over the front edge of the carriage and the claw on the device's locking arm has to grip over the back edge of the carriage. (The illustration shows the arrangement).
6. Turn lever A to the left to secure the sharpening device.
7. Push the green main switch.
8. Push the "Stacking" key to start the blade turning.
9. Move the carriage toward the blade until you hear the sharpening device engage the blade. Hold the carriage at that position with light pressure for approximately 20 seconds.
10. Pull the carriage back and stop the blade by pushing the "Stacking" key again. Check for any visible burrs on the blade. If there are none, repeat the sharpening procedure.
11. If there is burring, restart the blade with the "Stacking" key and move the carriage back toward the blade.
12. When the sharpening device engages the blade, pull the carriage back slightly and push on axle B to remove the burr.
13. Pull back the carriage and turn off the machine. Remove the sharpening device by turning lever A to the right and lifting the sharpener clear.





Troubleshooting

This section deals with the problems you may find when using the VA2000, and the methods and procedures for solving them quickly and easily.

Mechanical or electrical problems during operation

Indication	Problem	Solution
Grinding noise coming from machine during operation	Blade guard mounted badly; Blade guard is dirty; Deflector finger touches the blade	Loosen blade guard and resecure; Clean blade guard; Adjust deflector fingers
Chain frame guide roll is jumping	Pins on the chain are bent	Take off the chain frame and straighten the pins with a pair of flat nose pliers. Remove the chain frame
Stacking device touches chain frame	Stacking device is bent	straighten and the fingers of the stacking device
Metallic sound	Star knob of the stacking device is loose	Fasten the star knob
Slice gets caught by the deflector fingers	Distance between deflector fingers and blade is too large	Adjust deflector fingers with hexagon socket screws
Machine stops abruptly	Short-term voltage drop	Switch on the machine again
Machine is getting warm	Possible electrical short circuit within the plug assembly	Wall socket and plug have to be checked by an electrician.
Sausage skin tears or stacks are irregular		Sharpen the blade and take off burr after 3 sec.

Problems when operating the machine

The VA2000 is equipped with automatic fuses which will cut power if the machine is overloaded. If the machine malfunctions during operation proceed as follows. Switch off the machine at the main switch. Wait for 5 minutes and then turn on the machine again. If the malfunction continues call your Brice representative for servicing.

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